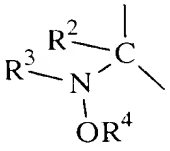
What is claimed is:

1. A composition for treating hair loss comprising:

A) an active ingredient selected from the group consisting of oximyl- and hydroxylamino- prostaglandins having the functionality



wherein C is a carbon atom bonded within a cyclopentyl ring and wherein the active ingredient selectively activates FP receptors and does not activate any other receptors that negate effects caused by activating the FP receptors, and wherein

R^2 is hydrogen, and R^3 is selected from the group consisting of hydrogen and a lower monovalent hydrocarbon group, with the proviso that alternatively, R^2 and R^3 may form a covalent bond, and

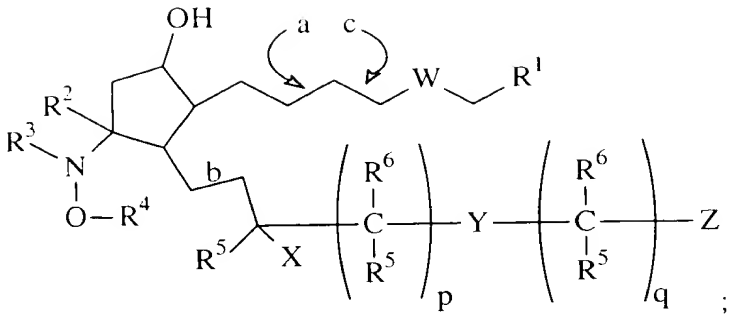
R^4 is selected from the group consisting of a hydrogen atom, a monovalent hydrocarbon group, a heterogeneous group, a carbocyclic group, heterocyclic group, an aromatic group, a heteroaromatic group, a substituted monovalent hydrocarbon group, a substituted heterogeneous group, a substituted carbocyclic group, a substituted heterocyclic group, a substituted aromatic group, and a substituted heteroaromatic group; and

B) a carrier.

2. The composition of claim 1, wherein R^4 is selected from the group consisting of a hydrogen atom and a monovalent hydrocarbon group of 1 to 8 carbon atoms.

3. The composition of claim 1, wherein

A) the active ingredient has the structure:



pharmaceutically acceptable salts and hydrates of the structure above; biohydrolyzable amides, esters, and imides of the structure above; and optical isomers, diastereomers, and enantiomers of the structure above; and combinations thereof;

wherein W is selected from the group consisting of an oxygen atom, a sulfur atom, NH, S(O), $S(O)_2$, and $-(CH_2)_m-$, wherein m is 0 to 3;

X is selected from the group consisting of NHR^8, OR^8, SR^9, and $S(O)R^9$;

Y is selected from the group consisting of a bond, an oxygen atom, a sulfur atom, NHR^8, S(O), and $S(O)_2$; with the proviso that when Y is NHR^8, no carbon atom in R^8 is bonded to more than one heteroatom;

Z is selected from the group consisting of H, CH_3, a carbocyclic group, a heterocyclic group, a substituted carbocyclic group, a substituted heterocyclic group, an aromatic group, a heteroaromatic group, a substituted aromatic group, and a substituted heteroaromatic group;

R^1 is selected from the group consisting of CO_2H, CO_2R^7, C(O)NHOH, $S(O)_2R^7$, $C(O)NHS(O)_2R^7$, and tetrazole;

each R^5 is independently selected from the group consisting of H, CH_3, and C_2H_5;

each R^6 is independently selected from the group consisting of H, CH_3, C_2H_5, OR^8, and NHR^8;

R^7 is selected from the group consisting of monovalent hydrocarbon groups, heterogeneous groups, aromatic groups, heteroaromatic groups, monocyclic carbocyclic groups, monocyclic heterocyclic groups, substituted monovalent

hydrocarbon groups, substituted aromatic groups, and substituted heteroaromatic groups;

each R^8 is independently selected from the group consisting of a hydrogen atom, an acyl group, a monovalent hydrocarbon group, a substituted monovalent hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, and heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;

each R^9 is independently selected from the group consisting of a monovalent hydrocarbon group, a substituted monovalent hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, and heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;

p is an integer with a value of 0 to 6, q is an integer with a value of 0 to 5, with the proviso that (p + q) = 1 to 5, and

bonds a, b, and c are each independently selected from the group consisting of a single bond, a cis double bond, and a trans double bond.

4. The composition of claim 3, wherein W is selected from the group consisting of an oxygen atom and $-(CH_2)_m-$.

5. The composition of claim 3, wherein X is OR^8.

6. The composition of claim 3, wherein Y is selected from the group consisting of a bond, an oxygen atom, and NHR^8.

7. The composition of claim 3, wherein Z is selected from the group consisting of aromatic, heteroaromatic, substituted aromatic, and substituted heteroaromatic groups.

8. The composition of claim 3, wherein R^1 is selected from the group consisting of CO_2H, C(O)NHOH, CO_2R^7, $C(O)NHS(O)_2R^7$, and tetrazole.

9. The composition of claim 3, wherein each R^5 is independently selected from the group consisting of H and CH_3.

10. The composition of claim 3, wherein each R^6 is independently selected from the group consisting of H, CH_3, C_2H_5, and OR^8.

11. The composition of claim 3, wherein R^7 is selected from the group consisting of methyl, ethyl, and isopropyl groups.

12. The composition of claim 3, wherein each R^8 is a hydrogen atom.

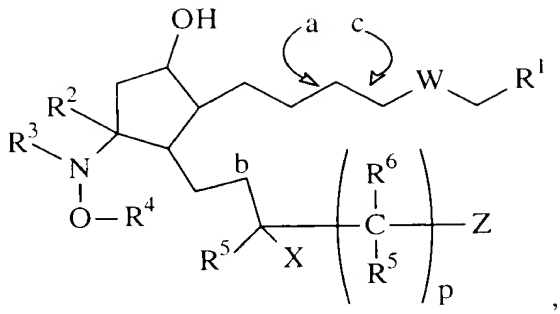
13. The composition of claim 3, wherein p is an integer with a value 1 to 5.

14. The composition of claim 3, wherein bond a is selected from the group consisting of a single bond and a cis double bond.

15. The composition of claim 3, wherein bond b is selected from the group consisting of a single bond and a trans double bond.

16. The composition of claim 3, wherein Y is a bond, p is 0, and q is 2 or 3.

17. The composition of claim 3, wherein Y is a bond, q is 0, and component A) has the structure:



,

wherein R^1, W, R^2, R^3, R^4, R^5, X, R^6, Z, p, and bonds a, b, and c are as described above.

18. The composition of claim 3, wherein component A) is added in an amount of

$$IC_{50} \times 10^{-2} \geq \%\text{ of component A)} \geq IC_{50} \times 10^{-3},$$

where IC_{50} of component A) is expressed in nanomolar units.

19. The composition of claim 18, wherein component C) an activity enhancer is added to the composition in an amount of 1 to 20%, and a sufficient amount of component B) is added such that the amounts of components A), B), and C) combined equal 100%.

20. The composition of claim 3, wherein component B) comprises an ingredient selected from the group consisting of q) emollients, r) propellants, s) solvents, t) humectants, u) thickeners, v) powders, w) fragrances, water, alcohols, aloe vera gel, allantoin, glycerin, vitamin A and E oils, mineral oil, propylene glycol, polypropylene glycol-2 myristyl propionate, dimethyl isosorbide, and combinations thereof.

21. The composition of claim 20, wherein ingredient q) is selected from the group consisting of stearyl alcohol, glyceryl monoricinoleate, glyceryl monostearate, propane-1,2-

diol, butane-1,3-diol, mink oil, cetyl alcohol, isopropyl isostearate, stearic acid, isobutyl palmitate, isocetyl stearate, oleyl alcohol, isopropyl laurate, hexyl laurate, decyl oleate, octadecan-2-ol, isocetyl alcohol, cetyl palmitate, di-n-butyl sebacate, isopropyl myristate, isopropyl palmitate, isopropyl stearate, butyl stearate, polyethylene glycol, triethylene glycol, lanolin, sesame oil, coconut oil, arachis oil, castor oil, acetylated lanolin alcohols, petrolatum, mineral oil, butyl myristate, isostearic acid, palmitic acid, isopropyl linoleate, lauryl lactate, myristyl lactate, decyl oleate, myristyl myristate, polydimethylsiloxane, and combinations thereof.

22. The composition of claim 20, wherein ingredient r) is selected from the group consisting of propane, butane, isobutane, dimethyl ether, carbon dioxide, nitrous oxide, and combinations thereof.

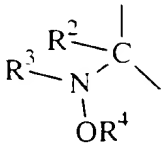
23. The composition of claim 20, wherein ingredient s) is selected from the group consisting of water, ethyl alcohol, methylene chloride, isopropanol, castor oil, ethylene glycol monoethyl ether, diethylene glycol monobutyl ether, diethylene glycol monoethyl ether, dimethyl sulfoxide, dimethyl formamide, tetrahydrofuran, and combinations thereof.

24. The composition of claim 20, wherein ingredient t) is selected from the group consisting of glycerin, sorbitol, sodium 2-pyrrolidone-5-carboxylate, soluble collagen, dibutyl phthalate, gelatin, and combinations thereof.

25. The composition of claim 20, wherein ingredient v) is selected from the group consisting of chalk, talc, fullers earth, kaolin, starch, gums, colloidal silicon dioxide, sodium polyacrylate, tetra alkyl ammonium smectites, trialkyl aryl ammonium smectites, chemically modified magnesium aluminum silicate, organically modified montmorillonite clay, hydrated aluminum silicate, fumed silica, carboxyvinyl polymer, sodium carboxymethyl cellulose, ethylene glycol monostearate, and combinations thereof.

26. A method of treating hair loss comprising administering to a mammal a composition comprising:

A) an active ingredient selected from the group consisting of oximyl- and hydroxylamino- prostaglandins having the functionality

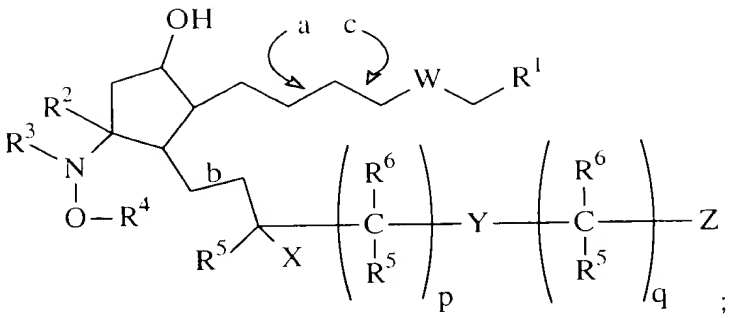


wherein C is a carbon atom bonded within a cyclopentyl ring and wherein the active ingredient selectively activates FP receptors and does not activate any other receptors that negate effects caused by activating the FP receptors, and wherein

R^2 is hydrogen, and R^3 is selected from the group consisting of hydrogen and a lower monovalent hydrocarbon group, with the proviso that alternatively, R^2 and R^3 may form a covalent bond, and

R^4 is selected from the group consisting of a hydrogen atom, a monovalent hydrocarbon group, a heterogeneous group, a carbocyclic group, heterocyclic group, an aromatic group, a heteroaromatic group, a substituted monovalent hydrocarbon group, a substituted heterogeneous group, a substituted carbocyclic group, a substituted heterocyclic group, a substituted aromatic group, and a substituted heteroaromatic group.

27. The method of claim 26, wherein component A) is selected from the group consisting of oximyl- and hydroxylamino- prostaglandins having the structure:



pharmaceutically acceptable salts and hydrates of the structure above; biohydrolyzable amides, esters, and imides of the structure above; optical isomers, diastereomers, and enantiomers of the structure above; and combinations thereof;

wherein W is selected from the group consisting of an oxygen atom, a sulfur atom, NH, S(O), $S(O)_2$, and $-(CH_2)_m-$, wherein m is 0 to 3;

X is selected from the group consisting of NHR^8, OR^8, SR^9, and $S(O)R^9$;

Y is selected from the group consisting of a bond, an oxygen atom, a sulfur atom, NHR^8, S(O), and $S(O)_2$; with the proviso that when Y is NHR^8, no carbon atom in R^8 is bonded to more than one heteroatom;

Z is selected from the group consisting of H, CH_3, a carbocyclic group, a heterocyclic group, a substituted carbocyclic group, a substituted heterocyclic group, an aromatic group, a heteroaromatic group, a substituted aromatic group, and a substituted heteroaromatic group;

R^1 is selected from the group consisting of CO_2H, C(O)NHOH, $S(O)_2R^7$, $C(O)NHS(O)_2R^7$, and tetrazole;

each R^5 is independently selected from the group consisting of H, CH_3, and C_2H_5;

each R^6 is independently selected from the group consisting of H, CH_3, C_2H_5, OR^8, and NHR^8;

R^7 is selected from the group consisting of monovalent hydrocarbon groups, heterogeneous groups, aromatic groups, heteroaromatic groups, monocyclic carbocyclic groups, monocyclic heterocyclic groups, substituted monovalent

hydrocarbon groups, substituted aromatic groups, and substituted heteroaromatic groups;

each R^8 is independently selected from the group consisting of a hydrogen atom, an acyl group, a monovalent hydrocarbon group, a substituted monovalent hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, and heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;

each R^9 is independently selected from the group consisting of a monovalent hydrocarbon group, a substituted monovalent hydrocarbon group, a heterogeneous group, a substituted heterogeneous group, a carbocyclic group, a substituted carbocyclic group, and heterocyclic group, a substituted heterocyclic group, an aromatic group, a substituted aromatic group, a heteroaromatic group, and a substituted heteroaromatic group;

p is an integer with a value of 0 to 6, q is an integer with a value of 0 to 5, with the proviso that (p + q) = 1 to 5, and

bonds a, b, and c are each independently selected from the group consisting of a single bond, a cis double bond, and a trans double bond.

28. The method of claim 27, wherein W is selected from the group consisting of an oxygen atom and $-(CH_2)_m-$.

29. The method of claim 27, wherein X is OR^8.

30. The method of claim 27, wherein Y is selected from the group consisting of a bond, an oxygen atom, and NHR^8.

31. The method of claim 27, wherein Z is selected from the group consisting of aromatic, heteroaromatic, substituted aromatic, and substituted heteroaromatic groups.

32. The method of claim 27, wherein R^1 is selected from the group consisting of CO_2H, C(O)NHOH, CO_2R^7, $C(O)NHS(O)_2R^7$, and tetrazole.

33. The method of claim 27, wherein each R^5 is independently selected from the group consisting of H and CH_3.

34. The method of claim 27, wherein each R^6 is independently selected from the group consisting of H, CH_3, C_2H_5, and OR^8.

35. The method of claim 27, wherein R^7 is selected from the group consisting of methyl, ethyl, and isopropyl groups.

36. The method of claim 27, wherein each R^8 is a hydrogen atom.

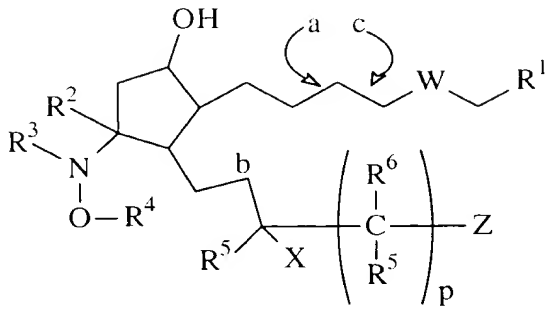
37. The method of claim 27, wherein p is an integer with a value 1 to 5,

38. The method of claim 27, wherein bond a is selected from the group consisting of a single bond and a cis double bond.

39. The method of claim 27, wherein bond b is selected from the group consisting of a single bond and a trans double bond.

40. The method of claim 27, wherein Y is a bond, p is 0, and q is 2 or 3.

41. The method of claim 27, wherein Y is a bond, q is 0, and component A) has the structure:



wherein R^1, W, R^2, R^3, R^4, R^5, X, R^6, Z, p, bonds a, b, and c are as described above.

42. The method of claim 27, wherein the composition is administered by a route selected from the group consisting of systemic and topical routes.

43. The method of claim 42, wherein the composition is a topical composition in a form selected from the group consisting of solutions, oils, creams, ointments, gels, lotions, shampoos, leave-on and rinse-out hair conditioners, milks, cleansers, moisturizers, sprays, and skin patches.

44. The method of claim 43, wherein the composition is a topical composition further comprisinga topical carrier comprising an ingredient selected from the group consisting of q) emollients, r) propellants, s) solvents, t) humectants, u) thickeners, v) powders, w) fragrances, water, alcohols, aloe vera gel, allantoin, glycerin, vitamin A and E oils, mineral oil, propylene glycol, polypropylene glycol-2 myristyl propionate, dimethyl isosorbide, and combinations thereof.

45. The method of claim 43, wherein the composition further comprises C) an activity enhancer selected from the group consisting of i) a hair growth stimulant, ii) a penetration enhancer, and combinations thereof.

46. The method of claim 45, wherein component i) is selected from the group vasodilator, an antiandrogen, a cyclosporin, a cyclosporin analog, an antimicrobial, an anti-inflammatory, a thyroid hormone, a thyroid hormone derivative, and a thyroid hormone analog, a non-selective prostaglandin agonist, a non-selective prostaglandin antagonist, a retinoid, a triterpene, and combinations thereof.

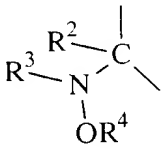
47. The method of claim 43, wherein component ii) is selected from the group consisting of 2-methyl propan-2-ol, propan-2-ol, ethyl-2-hydroxypropanoate, hexan-2,5-diol, polyoxyethylene(2) ethyl ether, di(2-hydroxypropyl) ether, pentan-2,4-diol, acetone, polyoxyethylene(2) methyl ether, 2-hydroxypropionic acid, 2-hydroxyoctanoic acid, propan-1-ol, 1,4-dioxane, tetrahydrofuran, butan-1,4-diol, propylene glycol dipelargonate, polyoxypropylene 15 stearyl ether, octyl alcohol, polyoxyethylene ester of oleyl alcohol, oleyl alcohol, lauryl alcohol, dioctyl adipate, dicapryl adipate, di-isopropyl adipate, di-isopropyl sebacate, dibutyl sebacate, diethyl sebacate, dimethyl sebacate, dioctyl sebacate, dibutyl suberate, dioctyl azelate, dibenzyl sebacate, dibutyl phthalate, dibutyl azelate, ethyl myristate, dimethyl azelate, butyl myristate, dibutyl succinate, didecyl phthalate, decyl oleate, ethyl caproate, ethyl salicylate, isopropyl palmitate, ethyl laurate, 2-ethyl-hexyl pelargonate, isopropyl isostearate, butyl laurate, benzyl benzoate, butyl benzoate, hexyl laurate, ethyl caprate, ethyl caprylate, butyl stearate, benzyl salicylate, 2-hydroxypropanoic acid, 2-hydroxyoctanoic acid, dimethyl sulphoxide, N,N-dimethyl acetamide, N,N-dimethyl formamide, 2-pyrrolidone, 1-methyl-2-pyrrolidone, 5-methyl-2-pyrrolidone, 1,5-dimethyl-2-pyrrolidone, 1-ethyl-2-pyrrolidone, phosphine oxides, sugar esters, tetrahydrofurfural alcohol, urea, diethyl-m-toluamide, 1-dodecylazacycloheptan-2-one, and combinations thereof.

48. The method of claim 43, wherein the topical composition locally administered on the skin once per day.

49. The method of claim 48, wherein the topical composition is administered once per day for 6 to 12 weeks.

50. A mascara composition comprising:

A) an active ingredient selected from the group consisting of oximyl- and hydroxylamino- prostaglandins having the functionality



wherein C is a carbon atom bonded within a cyclopentyl ring and wherein the active ingredient selectively activates FP receptors and does not activate any other receptors that negate effects caused by activating the FP receptors, and wherein

R^2 is hydrogen, and R^3 is selected from the group consisting of hydrogen and a lower monovalent hydrocarbon group, with the proviso that alternatively, R^2 and R^3 may form a covalent bond, and

R^4 is selected from the group consisting of a hydrogen atom, a monovalent hydrocarbon group, a heterogeneous group, a carbocyclic group, heterocyclic group, an aromatic group, a heteroaromatic group, a substituted monovalent hydrocarbon group, a substituted heterogeneous group, a substituted carbocyclic group, a substituted heterocyclic group, a substituted aromatic group, and a substituted heteroaromatic group,

dd) a water-insoluble material,

ee) a water-soluble, film-forming polymer,

ff) a wax;

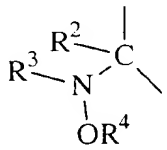
o) a surfactant;

gg) pigment; and

s) a solvent.

51. A method for darkening and thickening hair, wherein the method comprises applying to growing hair and skin a composition comprising:

A) an active ingredient selected from the group consisting of oximyl- and hydroxylamino- prostaglandins having the functionality



wherein in each functionality C is a carbon atom bonded within a cyclopentyl ring and wherein the active ingredient selectively activates FP receptors and does not activate any other receptors that negate effects caused by activating the FP receptors, and wherein

R^2 is hydrogen, and R^3 is selected from the group consisting of hydrogen and a lower monovalent hydrocarbon group, with the proviso that alternatively, R^2 and R^3 may form a covalent bond, and

R^4 is selected from the group consisting of a hydrogen atom, a monovalent hydrocarbon group, a heterogeneous group, a carbocyclic group, heterocyclic group, an aromatic group, a heteroaromatic group, a substituted monovalent hydrocarbon group, a substituted heterogeneous group, a substituted carbocyclic group, a substituted heterocyclic group, a substituted aromatic group, and a substituted heteroaromatic group; and

B) a carrier.